

instant claims are mere positional isomers of the compounds disclosed by Bernotas et al ('246) and Examiner implies that the 5-HT6 receptor activity of the instant compounds would be predictable by the teachings of '246. Examiner also contends that the process disclosed by '246 would give the instantly claimed products.

Applicants respectfully traverse the rejection. The indolylalkylamine compounds described by '246 contain an alkylamine moiety wherein the alkylamine group is specifically a terminal amine, i.e. an amine which is linked to the indole substrate as the terminus of an unconstrained, conformationally mobile alkyl chain of 2-5 carbon atoms. Even in those compounds of '246 wherein R<sub>5</sub> and R<sub>6</sub> taken together with the nitrogen atom form a piperidine, pyrrolidine or azepine ring, the nitrogen atom remains at the terminus of an unconstrained conformationally mobile C<sub>2</sub>-C<sub>5</sub> alkyl chain. Further, for those compounds of '246 wherein R<sub>5</sub> and R<sub>6</sub> taken together with the nitrogen atom form a ring, the valence of the nitrogen atom is fully satisfied thereby excluding any further substitution of the nitrogen atom. In sharp contrast, the compounds of the invention contain a pyrrolidine, piperidine or azepine ring attached directly to an indole (n is 0) or an indolylC<sub>1</sub>-C<sub>3</sub>alkyl group wherein the ring nitrogen is conformationally constrained. One skilled in the art would not predict that such constrained molecules would be able to adopt a conformation consistent with the 5-HT6 receptor pharmacophore based on the unconstrained and conformationally mobile compounds taught by '246. In fact, one skilled in the art of medicinal chemistry would predict such constraints may prevent acceptable conformations and eliminate affinity for the 5-HT6 receptor. Indeed, prior to the preparation and testing of such a constrained structure, it could not be predicted that such compounds would have the ability to bind with high affinity to a 5-HT6 receptor. Further, in the compounds of the instant invention, the piperidine, pyrrolidine or azepine ring is attached to the indole or indolylalkyl group through a ring carbon atom leaving the ring nitrogen atom available for further substitution with R<sub>5</sub>. There is no teaching in '246 which allows for the possibility of preparing or using the instant indolyl or indolylalkylpyrrolidine, -piperidine or -azepine compounds wherein the ring nitrogen atom is further substituted. The process described in '246 requires as reactant a haloalkylamine (formula III) having a terminal amine group NR<sub>5</sub>R<sub>6</sub>. This process does not produce the compounds of the instant invention, but rather produces compounds having an indolylalkylamine wherein the valence of the amine nitrogen, particularly when said amine is cyclic, is fully satisfied and not available for further substitution with an R<sub>5</sub> group. One skilled in the art would not look to the '246 process to prepare an azacycylalkylindole wherein the azacycle is attached through the ring carbon atom, i.e. the compounds of the instant invention.

Examiner alleges the compounds of '246 and the instant invention are "mere positional isomers" and cites ex parte Engelhard 208 USPQ 343 and in re Mehta 146 USPQ 284 as examples of positional isomerism. However, in re Mehta 146 USPQ 284 finds that the 2-position (carbon atom) and the 3-position (carbon atom) of a pyrrolidine ring may be

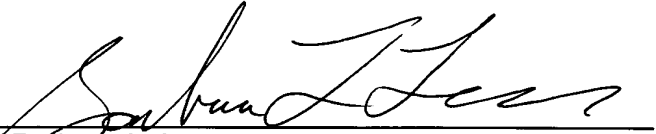
considered positional isomers. Clearly in re Mehta does not speak to the nitrogen atom of the pyrrolidine ring and does not find the nitrogen atom position and a carbon atom position of said ring to be positional isomers. Ex parte Engelhard 208 USPQ 343 does not speak to positional isomerism, but rather finds that a methyne carbon may be replaced with a tertiary nitrogen to achieve similar bioproperties. Applicants submit that neither citation is relevant to Examiner's allegation of positional isomerism and in fact the aforesaid cases teach away from said allegation.

Moreover, under 35 U.S.C. § 103(c), subject matter developed by another person, which qualifies as prior art only under subsection (e) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person. Applicants submit that the inventors of the instant claimed invention were, at the time the invention was made, employed by Wyeth and under obligation of assignment of the invention to Wyeth. Evidence that they have in fact assigned the claimed invention to the same person can be found in Reel/Frame 014995/0748 and Reel/Frame 014148/0064.

In conclusion, Applicants believe all of Examiner's rejections have been overcome in view of the foregoing. Applicants respectfully request Examiner to consider the above remarks, withdraw the rejections and allow the application.

Favorable treatment of the application is earnestly solicited.

Respectfully submitted,



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